Ethanol Predictive Model Concerns

ARB Predictive Model Workshop

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Inventory Modeling Concerns Raised by Stakeholders

- Over-prediction of permeation impacts, especially at high temperatures
- Modeling methodology concerns
  - Fuel tank temperature vs. ambient temperature
  - Multiplicative correction factor vs. additive correction factor
- Important to reconcile inventory impacts with independent analysis
- Inventory workgroup meeting to resolve issues

Proposed Handling of Emissions Performance of Normal and High Emitters

- Proposed by RFA, Jonathan Cohen ICF
- Normal and higher emitters respond differently to ethanol
- Supporting technical rationale provided by Transportation Fuels Consulting
- Remains an open issue pending appropriate review an analysis by ARB Staff

Ozone Effects

- Temporal characteristics of permeation emissions may be different than traditional evap emissions
- CO offset should be evaluated
- Reduction in reactivity weighted emissions with 3.5% oxygen

Next Steps

- Predictive Model update process currently appears to support continued year-round blending of 5.7% ethanol.
- Various RFG3 workgroups are in the process of resolving several stakeholder issues.
- It is not clear that 10% ethanol blends are precluded by the Predictive Model update process
  - Up to 7.7% ethanol appears feasible
  - Additional refining flexibility
  - Additional fuel supply

Summary

- Recent timing revisions for Predictive Model updates appear to recognize the need to provide adequate time to address stakeholder concerns.
- 10% ethanol blends can provide additional benefits in refining flexibility and additional fuel supply.
- Ethanol groups look forward to working with ARB and other stakeholders in resolving all stakeholder concerns with the best available data and technical methods.